# Department of *EUCOMOLOGY* Winter 2012 NEWS

## Research

### Focus On Faculty: Christopher Carlton

John Benjamin Holton Professor of Agriculture

#### By Emily Herrington

(Article originally appeared in 2012 Fall LSU Alumni Magazine, Reprinted with special permission)

Only five other people on Earth share the same research specialty as entomology professor Christopher Carlton.

That specialty is the Pselaphine subfamily of staphylinid beetles. The brown critters live in obscure habitats like leaf litter and range in size from 1 to 3 millimeters.

"There is a certain romance – for lack of a better word – in adopting a group of organisms that you're the expert on, nobody else knows about, there's no competition and there's not much known," he says.

Carlton teaches graduate-level insect taxonomy, in which students learn to identify insects at the family level. He's also developed an aquatic entomology course offered this fall and will take on an immature insects course. His favorite course to teach is insect taxonomy, which he says he's "almost gotten the hang of " after nearly 20 years. He frequently travels to New Zealand, Costa Rica and Arizona for "beetle blitzes," where he and his colleagues "do nothing but collect beetles."

Carlton also is the director of the Louisiana State Arthropod Museum, which contains about 1 million insects, boasting the largest collection in the state, and he's undertaken the daunting task of cataloging the museum's specimen records for a new online database. Through the database, anyone can browse through the museum's collection and learn about each organism.

So far, about 127,000 specimens have been catalogued, which Carlton calls a good start. More than 500,000 eventually will be added to the database.

Carlton developed a fascination with insects and nature at an early age. Catching snakes was one of his favorite activities while growing up in the small, rural town of Lake Village, Ark. After a lengthy period of being a selfproclaimed "snake guy," his interest drifted toward much smaller creatures – insects.

After an undergraduate beetle-collecting project at





Dr. Christopher Carlton

Hendrix College, he was hooked. He earned his master's and doctoral degrees from the University of Arkansas and left his patch of woods to take a job at LSU. To his surprise, he quickly settled in, adjusted to city life and never looked back. He says he enjoys the urban climate of the LSU community.

Carlton's research keeps him forever occupied, and the extent of his research can be overwhelming at times, he says.

"It's both fascinating and frustrating," he says. "And on bad days, a little bit depressing, because I realize I'll never even make a dent in the amount of undescribed diversity of these organisms."

On the rare occasion that he has spare time, Carlton fixes things. "That's what I do for relaxation," he says. His tinkering runs the gamut from repairing an old lawn mower left for trash to converting diesel-burning vehicles into vegetable oil drinkers. He also brews his own beer and enjoys lounging around his property in the woods.

## From the Department Head



Dr. Tim Schowalter

This has been an exciting year, as always, in our department. We have been blessed and saddened by events during the past year, but we continue to look forward to new opportunities and challenges.

As in the past, our faculty and students have continued to receive awards and external funding in recognition of their accomplishments. Seven of our 13 remaining faculty members received 10 awards and \$2 million in external support. Four graduate students also won awards.

The department helped celebrate the 125th anniversary of the Louisiana Agricultural Experiment Station this year. Entomology has been among the major contributors to improved agricultural production, food safety and



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Louisiana State University Agricultural Center William B. Richardson, Chancellor John S. Russin, Vice Chancellor and Director of Research Paul D. Coreil, Vice Chancellor and Director of Extension

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William Jenkins, Interim President and Chancellor College of Agriculture Kenneth L. Koonce, Dean

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urban pest control since the beginning of the Experiment Station and our department continues to provide cuttingedge research in a variety of areas.

We had another hurricane come ashore on the anniversary of Hurricane Katrina – Aug. 29, 2012. We still had tropical storm winds in Baton Rouge. Many suffered from widespread power outages and flooding, and a number of trees fell, but fortunately no loss of life this time.

Dr. Gene Reagan suffered a stroke May 30 and has been recovering since then. He has made substantial recovery since that time and is now able to visit coherently, walk with a walker and feed himself. He will require much more time before resuming active duty. For those wishing to send cards, his mailing address is 12567 Kentmere Ave., Baton Rouge, LA 70810.

We were deeply saddened by the passing of Dr. Mary Grodner on Sept. 5. Dr. Grodner had been a faculty member at LSU and later the AgCenter since 1973, serving the needs of the pest management industry as a pesticide safety educator and applicator certification trainer. She retired with more than 35 years of service in 2009.

We have made some changes to meet as many needs of the state as possible. I have taken responsibility for extension forest entomology and am teaching the insect portion of the Forest Insects and Diseases course this fall. I also have taken a larger role in working with LSU AgCenter Communications to develop timely press releases to maintain our visibility with the public. Three entomologists have been recruited around the state to assist with crop IPM.

We have just completed negotiations with Dr. Kristen Bartlett-Healy as our new tenure-track assistant professor (85 percent extension, 15 percent teaching) to cover public and animal health. She will start in March 2013. We also were able to secure extension funding for our insect diagnostic service (housed in the Louisiana State Arthropod Museum) so we can still provide free identifications. We continued to maintain strong programs with nearly \$2 million in external support by remaining faculty and a large indirect cost return account to maintain research and extension activities, despite the end this year of our French Quarter Full Stop termite control program as a result of congressional budget cuts.

As a result of the loss of more than 30 percent of our state budget during the past four years, we urgently need your support to finance distinguished speakers and student travel and awards. Please contact me at 225-578-1634 or <u>TSchowalter@agcenter.lsu.edu</u> if you would like to support these programs. For your convenience, an attachment is included at the end of this newsletter with options for you to check if you would like to contribute to the department or update your contact information.

We appreciate the support of all our donors and supporters, and we always enjoy hearing from you and welcome an opportunity to see you if you visit our campus. Sincerely, Tim Schowalter Professor and Head

## **Entomological Society of America, Southeastern Branch 2013 Meeting**

We hope you will be able to join us in Baton Rouge for the annual meeting of the Southeastern Branch of the Entomological Society of America meeting (March 2-6, 2013) at the Hilton Baton Rouge Capital Center.

For more about the meeting: <u>http://www.entsoc.org/</u> <u>Southeastern/2013SEB-annual-meeting</u>

Please visit your ESA login page (<u>https://online.entsoc.</u> <u>org/esassa/ssaauthmain.login\_page</u>) to begin the registration process. If you have any questions regarding online registration, please contact J.C. Juang (<u>seb@entsoc.org</u>).

For more about Baton Rouge activities: <u>http://www.</u> visitbatonrouge.com/

Attendees can fly into either Baton Rouge or New Orleans. Complimentary shuttle service is available to/from

the Hilton to the Baton Rouge airport for those staying at the host hotel. A crawfish boil and Cajun band will be arranged for the welcome reception on Monday, March 4. We also are making arrangements with the Audubon Insectarium in New Orleans to provide opportunities for guests to visit this outstanding entomological museum on Sunday, March 3.

About the Audubon Insectarium: <u>http://www.audubon-institute.org/visit/insectarium</u>

There are opportunities to help sponsor this and other events during the meeting. Please contact Dr. Mike Stout at <u>MStout@agcenter.lsu.edu</u> or by phone at 225-892-2972 if you are interested in sponsorship.

## News



Dr. Gene Reagan



Dr. Rogers Leonard



Dr. David Kerns

## Major competitive grants and contracts

**Dr. Gene Reagan** and colleagues at Texas AgriLife obtained a \$729,000 grant from the Agriculture and Food Research Initiative to study pest management in multicrop landscapes of bioenergy and conventional crops.

### **New appointments**

**Dr. Rogers Leonard**, formerly stationed at the Macon Ridge Research Station, with a 20 percent appointment in the Department of Entomology, has been appointed associate vice chancellor of the LSU AgCenter and associate director of the Louisiana Agricultural Experiment Station.

**Dr. David Kerns** is the new entomologist (90 percent research, 10 percent extension) at the LSU AgCenter's Macon Ridge Research Station in Winnsboro, La. He has a 20 percent appointment in the Entomology Department. Kerns received his B.S. in entomology from Texas A&M University in 1985, his M.S. in entomology from Oklahoma State University in 1987 and his Ph.D. in entomology from Auburn University in 1992. He has spent a brief portion of his professional career as a private agricultural consultant and working in the agrichemical industry. From 1994 through 2007, he was employed by the University of Arizona as an IPM specialist, where he worked on developing IPM programs primarily in citrus and vegetables. In 2007, he took a position with the Texas AgriLife Research and Extension Center in Lubbock, Texas, where he served until 2012 as the cotton extension entomologist. His responsibilities at the Macon Ridge Research Station will be field and laboratory research on insect pest management, primarily in cotton, corn, soybeans and grain sorghum, with statewide responsibilities in cotton. Much of his research includes insecticide efficacy, monitoring insecticide resistance, insect outbreaks, developing action thresholds and the development of insect-resistant transgenic crops. Kerns served as the editor-in-chief for the Entomological Society of America, Arthropod Management Tests, from 2004 through 2007 and currently is the president of the Southwestern Society of Entomologists.

Dr. Julien Beuzelin is the new entomologist (90

percent research, 10 percent extension) at the Dean Lee Research Station in Alexandria, La. He has a 20 percent appointment in the Entomology Department. Beuzelin received his Ph.D. from our department in 2011, working under Gene Reagan on sugarcane IPM and the effects of

(Continued on page 4)



Dr. Beuzelin speaking to a group of farmers in Franklin Parish, La.

### **3 Entomology Newsletter**



Sebe Brown



Dr. Rick Story



Dr. Natalie Hummel



Dr. Lane Foil



Dr. Gregg Henderson

#### (Continued from page 3)

landscape matrix on the spread of the Mexican rice borer. He continued in this program as a postdoctoral associate until being hired at Dean Lee. His responsibilities include IPM in row crops and ornamentals.

**Sebe Brown** is the new extension row crops entomologist stationed at Winnsboro. Brown received his M.S. from our department in 2012, working under Jeff Davis on soybean IPM.

### Retirements and Departures

Jeremy Allison resigned in January to take a position with the Canadian Forestry Service in Ottawa, Ontario.

**Dr. Jack Baldwin** retired in February after 31 years with the department as an extension specialist.

**Dr. Rick Story** retired in March after 31 years with the department as the horticultural entomologist.

**Dr. Natalie Hummel** resigned in June to take a position with Bayer Crop Science in Raleigh, N.C.

### **Honors and Awards**

**Dr. Lane Foil** has been appointed Pennington Chair for Wildlife Diseases at the Bob R. Jones Idlewild Research Station and will be dividing his time between the department and the research station.

**Dr. Gregg Henderson** received the Entomological Society of America's 2012 Recognition Award in Urban Entomology. This national-level award recognizes Dr. Henderson's outstanding accomplishments in research, teaching and extension on urban entomology. The award is sponsored by S.C. Johnson and Son Inc. Henderson also received the Entomological Society of America's Southeastern Branch Recognition Award in Urban Entomology.

Dr. Henderson's research focuses on termites, especially Formosan subterranean termites, but he also has conducted research on various urban pests of economic importance, such as ants, cockroaches, bed bugs, ticks and fleas. Dr. Henderson spends much time doing outreach projects that include presentations, home inspections, and identification of insects (sometimes talking to homeowners regarding



Dr. Linda Hooper-Bui



Dr. Fangneng Huang



Dr. Jim Ottea



Bal Gautam

delusory parasitosis). In addition to research and extension, he has been involved in teaching graduate and undergraduate courses offered in the department as well as a three-week summer course for Louisiana pest control operators. He has 20 patents, some of which are in commercial application.

**Dr. Rogers Leonard** received the Entomological Society of America's Southeastern Branch Recognition Award in Entomology. He also received the LSU AgCenter Doyle Chambers Research Award.

**Dr. Linda Hooper-Bui** received the Entomological Society of America's Southeastern Branch Distinguished Teaching Award.

**Dr. Tim Schowalter** was named as a Fellow of the Ecological Society of America. He also was a member of the AgMagic Team that was selected as one of two national winners for the 2011 Excellence in Teamwork Award presented by the Joint Council of Extension Professionals.

Dr. **Fangneng Huang** received the LSU AgCenter G&H Seed Award

**Drs. Fangneng Huang** and **Rogers Leonard** also were part of the team that won the LSU AgCenter Tipton Team Award.

**Dr. Jim Ottea** received the College of Agriculture Alumni Teaching Award.

**Ashley Thibodeaux** received the LSU Foundation Staff Service Award.

**Blake Wilson**, M.S. student under Dr. Gene Reagan, received the Entomological Society of America Kirby Hays Award. This is the highest professional award conferred on M.S. students.

**Bal Gautam**, Ph.D. student under Dr. Gregg Henderson, received the first-place award for his poster in the Medical, Urban and Veterinary Entomology Session 1.

**Matt VanWeelden**, Ph.D. student under Dr. Gene Reagan, received the graduate scholarship from the Louisiana Agricultural Consultants Association.

Yunlong Yang, who received his Ph.D. in 2011 and studied under Dr. Fangneng Huang, was one of three College of Agriculture nominees to be considered by the Graduate School for the university-wide LSU Alumni Distinguished Dissertation Award.

### In Memoriam

**Dr. Mary Grodner** passed away Sept 5, 2012. Dr. Grodner had been a faculty member for more than 35 years, starting with LSU in 1973 and retiring from the LSU AgCenter in 2009. During that time, she taught courses and provided invaluable service to the state's pesticide applicator industry through pesticide safety and applicator certifica-



tion workshops. She was a founding member and past president of the American Association of Pesticide Safety Educators and was widely recognized, including awards from Gamma Sigma Delta, the American Society of Sugar Cane Technologists, Louisiana Pest Management Association, Louisiana Mosquito Control Association and Entomological Society of America. She will be remembered fondly for her humor and wit, as well as for her tireless efforts on behalf of pesticide applicators and public health.

## Alumni News

**Dr. Michael Roe** (Entomology, LSU, Ph.D.-1976), Department of Entomology, North Carolina State University, gave the Jerry B. Graves (and Ellen) Distinguished Lecture this fall. He visited Sept. 20-21.

**Dr. Susan Jones** (Entomology, LSU, B.A.-1978, M.S.-1980), Department of Entomology, Ohio State University, visited our department and gave a Distinguished Lecture Oct. 5.

**Dr. David Ragsdale** (Entomology, LSU, M.S.-1977, Ph.D.-1980), Department of Entomology Head at Texas A&M, will give a Distinguished Lecture at 2 p.m. April 19, 2013 on the LSU campus in Baton Rouge (Life Sciences Building Room A101)

**Ray Young** (Entomology, LSU, M.S.-1957) was named 2011 LSU College of Agriculture Alumnus of the year.

## **Graduate Students**



Left to right: Dr. Tim Schowalter, department head, Chinmay Tikhe, Jong-Seok Park, Jaspreet Sidhu and Miyanda Moonga.

### Graduate student symposium held Oct. 12

The third Annual Graduate Student Symposium was held Oct. 12, 2012, in Baton Rouge and was sponsored by Bengal Products Inc. and DuPont Crop Protection.

The symposium is a competition that allows our students to prepare for the Entomological Society of America competitions. Winners of each section receive a \$100 prize and also are able to apply for travel funds from the LSU Graduate School for the national meeting of the Entomological Society of America.

This year we had two sections of oral presentations and two display sections in the symposium.

#### The sections and winners were: Oral presentations:

Systematics, Evolution and Biodiversity and Medical, Urban, Veterinary Entomology – Chinmay Tikhe Plant –Insect Ecosystems – Jaspreet K. Sidhu **Displays:** 

Systematics, Evolution and Biodiversity and Medical, Urban, Veterinary Entomology – Jong-Seok Park Plant –Insect Ecosystems – Miyanda Moonga

### **Recent Graduates**

Sebe Brown (M.S.) Lee Eisenberg (M.S.) Mike Ferro (Ph.D.) Jason Hamm (Ph.D.) Van Hilbun (M.S.) Jessica Parker (M.S.) Kat Parys (Ph.D.) David Wangila (M.S.)

## Entomology Club

### **Entomology Club Activities**

Matt VanWeelden Entomology Club President

Over the past year, the LSU Entomology Club has participated in several outreach, social and professional events.

In November 2012, the club hosted its first annual Homemade Favorites lunch in Room A465 of the Life Sciences Building. Students and staff were encouraged to bring in cuisine from their respective countries/states and then share them with others in the department. Funds generated from ticket sales were used by the club to help with organizing future events.

On Nov. 13-16, 2012, the Entomological Society of America hosted its annual meeting in Reno, Nev., where several students from the department participated in oral and poster presentations. Members from the LSU Entomology Club sold T-shirts and handed out information about the department at the club booth located in the exhibit hall. Three students (Max Adams, Jessica Parker and Matt VanWeelden) participated in the society's student debate competition, going up against students at UC Davis over the topic of land-grant universities. Proceedings from the competition will be published in American Entomologist.

In January, Max Adams traveled to Woodlawn Elementary School to talk to students about insect identification and basic biology. He traveled again in April to Southside Elementary School to show students how they can find fascinating insects in their own backyards. Outreach activities such as these always are appreciated by both students and teachers.

Last February, the Entomology Club hosted its second annual Chili Cook-off. Six teams entered the competition to see who could muster up the best chili recipe. People from all over the Life Sciences Building came to taste each chili and cast their votes about which recipe was the best. Winners from the competition were the Louisiana State Arthropod Museum Team, including Dr. Chris Carlton, Victoria Bayless and Mike Ferro, and Sweet n' Spicy, which included Blake Wilson, Julien Beuzelin, Anna Meszaros and Matt VanWeelden. The club hopes to host a third annual Chili Cook-off early next year.

In late March, members of the Entomology Club participated in the Baton Rouge Spring Garden Show, which was located at the Parker Coliseum on LSU's campus. The club's booth included several hands-on insect exhibits, such as a live beehive, Madagascar hissing cockroaches, a termite colony, unique pinned insect specimens and much more. The booth proved to be quite an attraction to kids visiting the garden show.

In April, members of both the Entomology Club and the department showed their support in helping organize the entomology portion of the LSU AgCenter's annual AgMagic program. Children from all over East Baton Rouge Parish and surrounding areas flocked to this event to learn about agriculture in Louisiana. The entomology portion of AgMagic was most memorable for many children because of the live insect exhibits.

In June, the Entomology Department had the privilege of hosting the Copesan Technical Committee, which is a food industry IPM group. Members of the Entomology Club helped with coordinating an insect collecting trip for the visiting committee members. Members of the committee were very enthusiastic to have the opportunity to collect insects from Louisiana.

Also in June, Entomology Club members helped judge the 4-H entomology presentations. Participants from parishes across Louisiana competed in presenting educational material on how to manage specific insect pests such as the red imported fire ant, brown widow spider and Mexican rice borer. Presentations included skits, music and demonstrations related to pest management.

Entomology Club officers for 2012-2013 are Matt VanWeelden (president), Jaspreet Sidhu (vice president), Max Adams (secretary) and Bryce Blackman (treasurer). For more information, visit the Entomology Club at LSU's Facebook page.

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